

Chapter 7: Alternative DCF Models

The two-stage non-constant growth DCF model described in Chapter 4 has a quarterly counterpart:

$$\begin{aligned}
 P_0 = & \frac{D_1(1+g)}{(1+K)^{0.25}} + \frac{D_2(1+g)}{(1+K)^{0.50}} \\
 & + \frac{D_3(1+g)}{(1+K)^{0.75}} + \frac{D_3(1+g)}{(1+K)^{1.00}} \\
 & + \frac{D_1(1+g)^2}{(1+K)^{1.25}} + \frac{D_2(1+g)^2}{(1+K)^{1.50}} \\
 & + \frac{D_3(1+g)^2}{(1+K)^{1.75}} + \frac{D_3(1+g)^2}{(1+K)^{2.00}} \\
 & + \frac{P_2}{(1+K)^{2.00}}
 \end{aligned} \tag{7-3}$$

The symbol g represents the first stage growth rate while P_2 represents the stock price in period 2 that is obtained by applying the quarterly DCF model using the second-stage growth rate.

Intuitively, the quarterly form of the DCF model described by Equation 7-1 resembles the standard annual form, but with a slightly modified dividend yield component. Letting $D_1' = D_1(1+K)^{3/4} + D_2(1+K)^{1/2} + D_3(1+K)^{1/4} + D_4$ in Equation 7-1, the quarterly DCF equation becomes:

$$K = D_1' / P_0 + g \tag{7-4}$$

which is very similar to the annual version. One can think of the D_1' term as an augmented D_1 term that simply captures the added time value of money associated with investors receiving successive quarterly dividends and reinvesting them over the remainder of the year at $K\%$. That is to say, during the course of one year, the investor has the value of the first quarter's dividend for 3/4 of the year; the second quarter dividend for 1/2 of the year; the third quarter dividend for 1/4 of the year, and the fourth quarter dividend is received at the end of the year. The following illustration shows how to implement the quarterly DCF model and estimate the investor's required market return.

Regulatory Finance



EXAMPLE 7-1

The common stock of Consolidated Natural Gas (CNG) is trading at \$52.13. The dividend is expected to increase annually at a constant rate of 8.8%. The current quarterly dividend rate is \$0.48 and has been in effect for two quarters. Thus, an investor buying CNG stock expects to receive, in the next year, two more dividends at the existing rate of \$0.48 and two dividends at the new rate of $\$0.48(1 + g)$. The cost of equity capital is obtained by solving iteratively the quarterly version of the DCF model in Equation 7-1 by means of a computer spreadsheet. To solve that equation, the following input data for CNG:

$$D_1 = \$0.48$$

$$D_2 = \$0.48$$

$$D_3 = \$0.48(1 + 0.088) = \$0.52$$

$$D_4 = \$0.48(1 + 0.088) = \$0.52$$

$$P_0 = \$52.13$$

$$g = 8.80\%$$

are substituted into Equation 7-1 as follows:

$$K = \frac{\$0.48(1 + 1/K)^1}{\$52.13} + \frac{\$0.48(1 + 1/K)^2}{\$52.13} + \frac{\$0.52(1 + 1/K)^3}{\$52.13} + \frac{\$0.52(1 + 1/K)^4}{\$52.13}$$

The equation is solved iteratively by successive approximations for K , the cost of equity. Here, $K = 12.82\%$.

Note that the annual DCF model produces an estimate of 12.64%, which is less than the 12.82% estimate derived from the quarterly DCF model.

$$K = D_1/P_0 + g = \$2.00/\$52.13 + 0.088 = 12.64\%$$

The difference is attributable to the time value of money associated with receiving quarterly dividends. The annual version of the DCF model typically understates the cost of equity by approximately 30-40 basis points, depending on the magnitude of the dividend yield component.

Chapter 7: Alternative DCF Models

The cost of equity capital estimate of 12.82% should be translated into a fair return on equity by allowing for a 5% flotation costs factor. This is accomplished by dividing the dividend yield component of the cost of equity figure by 0.95 to produce a fair DCF rate of return on equity of 13.03%.

7.2 Other Alternative DCF Models

Other alternative functional forms of the DCF model are available but are largely unrealistic and/or theoretically incorrect. The continuous compounding DCF model, for example, is developed assuming that dividends are paid continuously rather than at discrete time intervals.¹ Clearly, this model does not reflect reality, any more than does the annual DCF model, which assumes that dividends are paid once a year at the end of the year. The continuous DCF model has the following form:

$$K_c = D_0 / P_0 + g \quad (7-5)$$

where K_c = investor's expected return from the continuous DCF model

D_0 = annual per share dividend at time 0, i.e., current dividend

Another DCF model sometimes used by analysts, notably by the Federal Energy Regulatory Commission in its determination of the electric utility industry's generic rate of return on equity before 1993, lies halfway between the continuous and annual forms of the DCF model:

$$K_{ad hoc} = D_0 (1 + 0.5G) / P_0 + g \quad (7-6)$$

where $K_{ad hoc}$ = investor's expected return from the ad hoc DCF model

This "ad hoc" DCF model is based on the arbitrary assumption that the firm is halfway into its quarterly dividend cycle and assigns half a year's growth to the dividend. Of course, the model does not reflect reality and is arbitrary in nature. Only the quarterly compounding DCF model reflects reality, is theoretically correct, and is computationally tractable.

¹ The effective return under continuous compounding is computed with the following formula:

$$K_c = \frac{D_0 [K_c / \ln(1 + k_e)] + g}{P_0}$$

Consumers Illinois Water Company
Derivation of Dividend Yield for Use in the
Discounted Cash Flow Model

	Dividend Yield				
	Spot (03/21/00) (1)	Average of Last 3 Months (2)	Average of Last 6 Months (3)	Average of Last 12 Months (4)	Average Dividend Yield (5)
<u>Proxy Group of Seven Water Companies</u>					
American Water Works Co., Inc.	4.2 %	4.1 %	3.6 %	3.2 %	3.8 %
Conn. Water Service, Inc.	4.1	3.9	3.8	4.2	4.0
E'town Corporation	3.2	3.2	3.6	4.1	3.5
Middlesex Water Company	4.3	4.1	4.0	4.3	4.2
Pennichuck Corporation	4.3	3.2	3.4	3.8	3.7
Philadelphia Suburban Corp.	3.8	3.7	3.4	3.2	3.5
United Water Resources, Inc.	2.8	2.8	2.8	3.5	3.0
Average	<u>3.8 %</u>	<u>3.6 %</u>	<u>3.5 %</u>	<u>3.8 %</u>	<u>3.7 %</u>
<u>Proxy Group of Eight Utilities Selected on the Basis of Least Relative Distance</u>					
American Water Works Co., Inc.	4.2 %	4.1 %	3.6 %	3.3 %	3.8 %
Berkshire Energy Resources	3.3	3.4	3.8	4.6	3.8
CMS Energy Corp.	7.5	6.1	5.2	4.2	5.8
Eastern Utilities Associates	5.3	5.4	5.5	5.6	5.5
Energy West Inc.	6.2	5.8	5.8	5.6	5.9
Hawaiian Electric Industries, Inc.	8.3	8.5	8.0	7.5	8.1
Southern Company	6.3	5.7	5.5	5.3	5.7
United Water Resources, Inc.	2.8	2.8	2.8	3.5	3.0
Average	<u>5.5 %</u>	<u>5.2 %</u>	<u>5.0 %</u>	<u>5.0 %</u>	<u>5.2 %</u>

- Notes: (1) The spot dividend yield is the current annualized dividend per share divided by the spot market price on 03/21/00.
- (2) The average 3-month dividend yield was computed by relating the indicated annualized dividend rate and market price on the last trading day of each of the three months ended February 29, 2000
- (3) The average 6-month dividend yield was computed by relating the indicated annualized dividend rate and market price on the last trading day of each of the six months ended February 29, 2000
- (4) The average 12-month dividend yield was computed by relating the indicated annualized dividend rate and market price on the last trading day of each of the twelve months ended February 29, 2000
- (5) Equal weight has been given to the 12-month average, 6-month average, 3-month average and spot dividend yield. This provides recognition of current conditions, but does not place undue emphasis thereon.

Source of Information: Standard & Poor's Compustat Services, Inc., PC Plus Database
CheckFree Investment Services <http://qs.secapl.com/cgi-bin/q>

Consumers Illinois Water Company
Current Institutional Holdings (1) and Individual Holdings (2) for the
Proxy Group of Seven Water Companies and the
Proxy Group of Eight Utilities Selected on the Basis of Least Relative Distance

	<u>1</u>	<u>2</u>
	February 2000 Percentage of Institutional Holdings (1)	February 2000 Percentage of Individual Holdings (2)
<u>Proxy Group of Seven Value Line Water Companies</u>		
Amer. Water Works Co., Inc.	31.7 %	68.3 %
Conn. Water Service, Inc.	9.1	90.9
E'town Corporation	28.2	71.8
Middlesex Water Company	NA	NA
Pennichuck Corporation	NA	NA
Philadelphia Suburban Corp.	19.2	80.8
United Water Resources, Inc.	19.2	80.8
Average	<u>21.5 %</u>	<u>78.5 %</u>
<u>Proxy Group of Eight Utilities Selected on the Basis of Least Relative Distance</u>		
American Water Works Co., Inc.	31.7 %	68.3 %
Berkshire Energy Resources	NA	NA
CMS Energy Corp.	68.6	31.4
Eastern Utilities Associates	51.1	48.9
Energy West Inc.	2.0	98.0
Hawaiian Electric Industries, Inc.	27.9	72.1
Southern Company	34.3	65.7
United Water Resources, Inc.	19.2	80.8
Average	<u>33.5 %</u>	<u>66.5 %</u>

Notes: (1) The percentage of institutional holdings is calculated by dividing the number of shares held by institutions by the number of shares outstanding.

(2) (1 - column 1).

Source of Information: Standard & Poor's Stock Guide

Consumers Illinois Water Company
Historical and Projected Growth

	1	2	3	4	5	6	7	8	9
	Value Line Historical Five Year Growth Rate (1)		Five Year Historical BR + SV (2)	Value Line Projected 1996-'98 to 2002-'04 Growth Rate (1)		I/B/E/S Projected Five Year Growth Rate	Average Projected Five Year Growth Rate in EPS (3)	Projected Five Year BR + SV (4)	Conclusion of Growth Rate
	DPS	EPS		DPS	EPS	EPS			
<u>Proxy Group of Seven Water Companies</u>									
American Water Works Co., Inc.	10.5 %	5.5 %	7.5 %	7.0 %	8.0 %	6.18 %	[6]	7.1 %	8.3 %
Conn. Water Service, Inc.	1.3 (5)	3.5 (5)	3.4	NA	NA	3.00	[1]	3.0	NA
E'town Corporation	0.5	0.5	3.7	2.0	6.0	3.00	[2]	4.5	3.3
Middlesex Water Company	2.9 (5)	1.5 (5)	3.5	NA	NA	3.00	[1]	3.0	NA
Pennichuck Corporation	9.6 (5)	25.4 (5)	5.3	NA	NA	3.00	[1]	3.0	NA
Philadelphia Suburban Corp.	4.0	7.5	5.3	5.0	9.0	9.73	[6]	9.4	11.0
United Water Resources, Inc.	--	1.0	5.9	1.5	7.5	5.17	[3]	6.3	3.9
Average	4.1 %	3.3 % (6)	4.9 %	3.9 %	7.6 %	4.73 %		5.2 %	6.6 %
Range of Growth Rates									3.3% - 7.6%
Midpoint of Range									5.5%
Average of all Growth Rates (7)									5.0%
Average of Midpoint of Range and Average of all Growth Rates									5.3%
Average of Projected EPS Growth Rates (8)									5.2%
<u>Proxy Group of Eight Utilities Selected on the Basis of Least Relative Distance</u>									
American Water Works Co., Inc.	10.5 %	5.5 %	7.5 %	7.0 %	8.0 %	6.18 %	[6]	7.1 %	8.3 %
Berkshire Energy Resources	(0.5) (5)	7.1 (5)	4.3	NA	NA	3.00	[1]	3.0	NA
CMS Energy Corp.	17.0	8.5	11.7	9.0	9.5	9.88	[16]	9.7	9.6
Eastern Utilities Associates	3.5	(2.5)	1.9	Nil	0.5	2.00	[2]	1.3	0.7
Energy West Inc.	7.0 (5)	3.3 (5)	5.1	NA	NA	5.00	[1]	5.0	NA
Hawaiian Electric Industries, Inc.	1.5	2.5	2.2	0.5	2.0	3.23	[7]	2.6	2.6
Southern Company	3.5	3.0	2.8	0.5	9.0	5.97	[19]	7.5	7.8
United Water Resources, Inc.	--	1.0	5.9	1.5	7.5	5.17	[3]	6.3	3.9
Average	5.3 % (9)	4.4 % (9)	5.2 %	3.1 %	6.1 %	5.05 %		5.3 %	5.5 %
Range of Growth Rates									3.1% - 6.1%
Midpoint of Range									4.6%
Average of all Growth Rates (7)									5.0%
Average of Midpoint of Range and Average of all Growth Rates									4.8%
Average of Projected EPS Growth Rates (8)									5.3%

- Notes: (1) As shown on pages 9 through 16 of this Schedule. Historical growth rates are five-year compound growth rates.
(2) From page 2 of this Schedule.
(3) Average of Columns 5 and 6.
(4) From page 6 of this Schedule.
(5) Calculated using the same methodology as Value Line Investment Survey, i.e., three-year base periods.
(6) Excludes the 25.4% historical EPS growth rate for Pennichuck Corporation. In Ms. Ahern's opinion such a growth rate is not representative of the growth in EPS which can be expected to be sustainable prospectively.
(7) Average of Columns 1, 2, 3, 4, 5, 6, and 8.
(8) From Column 7.
(9) Excludes negative growth rate, since it is illogical that investors would invest in the common equity of a firm with the expectation of negative growth.

Source of Information: Value Line Investment Survey, January 7, February 4, February 18, and March 10, 2000, Standard Edition
Market Guide -I/B/E/S Earnings Estimates, March 16, 2000, yahoo.marketquide.com/mgi/

Consumers Illinois Water Company
Calculation of Historical BR + SV

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
	<u>BR (1)</u>	<u>S Factor (2)</u>	<u>V Factor (3)</u>	<u>SV (4)</u>	<u>BR + SV (5)</u>
<u>Proxy Group of Seven Water Companies</u>					
American Water Works Co., Inc.	5.4 %	5.4 %	38.0 %	2.1 %	7.5 %
Conn. Water Service, Inc.	2.8	1.6	39.0	0.6	3.4
E'town Corporation	1.5	8.6	25.9	2.2	3.7
Middlesex Water Company	1.9	4.3	38.2	1.6	3.5
Pennichuck Corporation	4.2	11.4	9.7	1.1	5.3
Philadelphia Suburban Corp.	3.3	3.9	52.1	2.0	5.3
United Water Resources, Inc.	1.6	14.8	28.8	4.3	5.9
Average	<u>3.0 %</u>	<u>7.1 %</u>	<u>33.1 %</u>	<u>2.0 %</u>	<u>4.9 %</u>
<u>Proxy Group of Eight Utilities Selected on the Basis of Least Relative Distance</u>					
American Water Works Co., Inc.	5.4 %	5.4 %	38.0 %	2.1 %	7.5 %
Berkshire Energy Resources	3.0	6.2	21.1	1.3	4.3
CMS Energy Corp.	8.3	6.6	51.4	3.4	11.7
Eastern Utilities Associates	1.6	1.4	20.8	0.3	1.9
Energy West Inc.	4.2	2.0	44.6	0.9	5.1
Hawaiian Electric Industries, Inc.	1.2	3.0	32.2	1.0	2.2
Southern Company	2.1	1.7	42.9	0.7	2.8
United Water Resources, Inc.	1.6	14.8	28.8	4.3	5.9
Average	<u>3.4 %</u>	<u>5.1 %</u>	<u>35.0 %</u>	<u>1.8 %</u>	<u>5.2 %</u>

- Notes: (1) From column 6, pages 3 and 4 of this Schedule.
(2) From column 12, page 5 of this Schedule.
(3) From column 7, page 6 of this Schedule.
(4) Column 2 * column 3.
(5) Column 1 + column 4.

Consumers Illinois Water Company
Historical Internal Growth Rate (1), i.e., BR, for
the Proxy Group of Seven Water Companies
for the Years 1994-1998

	1	2	3	4	5	6
						Five-Year Average 1994-1998 Internal Growth Rate, i.e., BR
	1998	1997	1996	1995	1994	
<u>Proxy Group of Seven Water Companies</u>						
<u>American Water Works Co., Inc.</u>						
Common Equity Return Rate	10.67 %	10.47 %	10.41 %	11.35 %	10.75 %	
Retention Ratio	48.23	47.82	47.49	51.75	53.95	
Internal Growth Rate (1)	5.15	5.01	4.94	5.87	5.80	5.4 %
<u>Conn. Water Service, Inc.</u>						
Common Equity Return Rate	12.15 %	12.25 %	12.37 %	12.68 %	12.54 %	
Retention Ratio	23.75	22.92	22.41	22.58	20.63	
Internal Growth Rate (1)	2.89	2.81	2.77	2.86	2.59	2.8
<u>E'town Corporation</u>						
Common Equity Return Rate	10.91 %	10.21 %	8.36 %	9.27 %	8.59 %	
Retention Ratio	24.19	16.23	(3.72)	3.63	(6.35)	
Internal Growth Rate (1)	2.64	1.66	(0.31)	0.34	(0.55)	1.5 (2)
<u>Middlesex Water Company</u>						
Common Equity Return Rate	10.52 %	11.22 %	10.34 %	11.99 %	12.10 %	
Retention Ratio	19.59	15.51	8.07	20.25	20.28	
Internal Growth Rate (1)	2.06	1.74	0.83	2.43	2.45	1.9
<u>Pennichuck Corporation</u>						
Common Equity Return Rate	10.90 %	9.55 %	9.73 %	9.09 %	8.09 %	
Retention Ratio	53.94	38.37	38.93	43.29	43.09	
Internal Growth Rate (1)	5.88	3.66	3.79	3.94	3.49	4.2
<u>Philadelphia Suburban Corp.</u>						
Common Equity Return Rate	13.53 %	12.49 %	11.84 %	11.99 %	11.18 %	
Retention Ratio	36.02	29.85	25.12	24.87	19.19	
Internal Growth Rate (1)	4.87	3.73	2.97	2.98	2.15	3.3
<u>United Water Resources, Inc.</u>						
Common Equity Return Rate	10.05 %	7.24 %	10.24 %	4.89 %	10.09 %	
Retention Ratio	21.63	(0.29)	19.30	(69.61)	7.38	
Internal Growth Rate (1)	2.17	(0.02)	1.98	(3.40)	0.74	1.6 (2)
Average						3.0 %

Notes: (1) The internal growth rate is calculated by multiplying the common equity return rate by the retention ratio (100% minus the dividend payout ratio). All data are on a

(2) Excludes negatives.

Source of Information: Standard & Poor's Compustat Services, Inc., PC Plus Database

Consumers Illinois Water Company
Historical Internal Growth Rate (1), i.e., BR, for
the Proxy Group of Eight Utilities Selected on the Basis of Least Relative Distance
for the Years 1994-1998

	1	2	3	4	5	6
						Five-Year Average 1994-1998 Internal Growth Rate, i.e., BR
	1998	1997	1996	1995	1994	
<u>Proxy Group of Eight Utilities Selected on the Basis of Least Relative Distance</u>						
<u>American Water Works Co., Inc.</u>						
Common Equity Return Rate	10.67 %	10.47 %	10.41 %	11.35 %	10.75 %	
Retention Ratio	48.23	47.82	47.49	51.75	53.95	
Internal Growth Rate (1)	5.15	5.01	4.94	5.87	5.80	5.4 %
<u>Berkshire Energy Resources</u>						
Common Equity Return Rate	8.56 %	10.88 %	12.29 %	7.25 %	13.34 %	
Retention Ratio	6.19	25.81	33.09	(20.71)	35.56	
Internal Growth Rate (1)	0.53	2.81	4.07	(1.50)	4.74	3.0 (2)
<u>CMS Energy Corp.</u>						
Common Equity Return Rate	11.54 %	14.57 %	15.14 %	15.84 %	17.27 %	
Retention Ratio	42.15	55.60	57.08	58.82	62.57	
Internal Growth Rate (1)	4.86	8.10	8.64	9.32	10.81	8.3
<u>Eastern Utilities Associates</u>						
Common Equity Return Rate	9.29 %	10.19 %	8.20 %	8.81 %	13.56 %	
Retention Ratio	2.26	10.63	(9.81)	1.77	37.10	
Internal Growth Rate (1)	0.21	1.08	(0.80)	0.16	5.03	1.6 (2)
<u>Energy West Inc.</u>						
Common Equity Return Rate	12.25 %	11.05 %	11.55 %	15.19 %	13.89 %	
Retention Ratio	29.87	22.74	26.76	43.42	38.05	
Internal Growth Rate (1)	3.66	2.51	3.09	6.60	5.29	4.2
<u>Hawaiian Electric Industries, Inc.</u>						
Common Equity Return Rate	11.53 %	10.89 %	10.47 %	10.98 %	11.02 %	
Retention Ratio	16.07	11.52	7.24	10.82	10.29	
Internal Growth Rate (1)	1.85	1.25	0.76	1.19	1.13	1.2
<u>Southern Company</u>						
Common Equity Return Rate	10.05 %	10.31 %	12.53 %	13.01 %	12.47 %	
Retention Ratio	4.50	8.54	24.93	26.46	22.50	
Internal Growth Rate (1)	0.45	0.88	3.12	3.44	2.81	2.1
<u>United Water Resources, Inc.</u>						
Common Equity Return Rate	10.05 %	7.24 %	10.24 %	4.89 %	10.09 %	
Retention Ratio	21.63	(0.29)	19.30	(69.61)	7.38	
Internal Growth Rate (1)	2.17	(0.02)	1.98	(3.40)	0.74	1.6 (2)
Average						3.4 %

Notes: (1) The internal growth rate is calculated by multiplying the common equity return rate by the retention ratio (100% minus the dividend payout ratio). All data are on a
(2) Excludes negatives.

Source of Information: Standard & Poor's Compustat Services, Inc., PC Plus Database

Consumers Illinois Water Company
Calculation of Five Year Average Growth in Common Shares Outstanding (1), i.e., S Factor

	1	2	3	4	5	6	7	8	9	10	11	12
	1993 Common Shares Outstanding (1)	93-94 Growth	1994 Common Shares Outstanding (1)	94-95 Growth	1995 Common Shares Outstanding (1)	95-96 Growth	1996 Common Shares Outstanding (1)	96-97 Growth	1997 Common Shares Outstanding (1)	97-98 Growth	1998 Common Shares Outstanding (1)	Five Year Average Common Share Growth
<u>Proxy Group of Seven Water Companies</u>												
American Water Works Co., Inc.	62,488	4.5 %	65,318	3.8 %	67,826	15.6 %	78,421	1.6 %	79,686	1.5 %	80,895	5.4 %
Conn. Water Service, Inc.	4,185	2.9	4,307	3.3	4,451	1.5	4,518	0.2	4,527	0.2	4,536	1.6
E'town Corporation	5,639	17.1	6,603	13.9	7,523	3.4	7,782	3.1	8,022	5.6	8,471	8.6
Middlesex Water Company	3,979	1.3	4,031	2.6	4,137	1.6	4,205	1.5	4,269	14.7	4,897	4.3
Pennichuck Corporation	1,069	0.5	1,074	0.4	1,078	3.7	1,118	1.4	1,134	50.8	1,710	11.4
Philadelphia Suburban Corp.	22,859	2.5	23,435	4.0	24,377	5.0	25,598	2.4	26,213	5.8	27,727	3.9
United Water Resources, Inc.	20,216	54.7	31,281	5.1	32,880	5.1	34,549	5.1	36,295	4.2	37,836	14.8
Average												<u>7.1 %</u>
 <u>Proxy Group of Eight Utilities Selected on the Basis of Least Relative Distance</u>												
American Water Works Co., Inc.	62,488	4.5 %	65,318	3.8 %	67,826	15.6 %	78,421	1.6 %	79,686	1.5 %	80,895	5.4 %
Berkshire Energy Resources	1,733	2.0	1,767	19.0	2,103	2.4	2,153	2.7	2,212	4.7	2,316	6.2
CMS Energy Corp.	85,197	1.6	86,535	14.6	99,212	3.5	102,69	6.2	109,011	6.9	116,557	6.6
Eastern Utilities Associates	19,033	4.7	19,937	2.5	20,437	0.0	20,436	0.0	20,436	0.0	20,436	1.4
Energy West Inc.	2,18	0.5	2,191	2.9	2,254	3.0	2,321	1.6	2,357	2.0	2,403	2.0
Hawaiian Electric Industries, Inc.	27,675	3.5	28,655	3.9	29,773	3.6	30,853	3.4	31,895	0.7	32,116	3.0
Southern Company	642,662	2.2	656,528	2.0	669,543	1.1	677,036	2.4	693,423	0.6	697,805	1.7
United Water Resources, Inc.	20,216	54.7	31,281	5.1	32,88	5.1	34,549	5.1	36,295	4.2	37,836	14.8
Average												<u>5.1 %</u>

Notes: (1) Year-end shares outstanding.
(2) Excludes negatives.

Source of Information: Standard & Poor's Compustat Services, Inc., PC Plus Database

Consumers Illinois Water Company
Calculation of the Premium/Discount of a
Company's Stock Price Relative to its Book Value, i.e., V Factor

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
	<u>1994 Market to Book Ratio (1)</u>	<u>1995 Market to Book Ratio (1)</u>	<u>1996 Market to Book Ratio (1)</u>	<u>1997 Market to Book Ratio (1)</u>	<u>1998 Market to Book Ratio (1)</u>	<u>Five Year Average Market to Book Ratio</u>	<u>V Factor (2)</u>
<u>Proxy Group of Seven Water Companies</u>							
American Water Works Co., Inc.	132.4 %	141.6 %	155.5 %	178.1 %	199.0 %	161.3 %	38.0 %
Conn. Water Service, Inc.	154.3	149.3	155.6	167.9	192.8	164.0	39.0
E'town Corporation	120.8	118.3	124.2	146.3	164.9	134.9	25.9
Middlesex Water Company	169.0	150.2	149.7	164.0	175.6	161.7	38.2
Pennichuck Corporation	98.3	99.0	106.5	100.7	149.6	110.8	9.7
Philadelphia Suburban Corp.	152.1	154.6	188.5	236.5	312.6	208.9	52.1
United Water Resources, Inc.	127.3	117.1	132.7	152.3	172.8	140.4	28.8
Average						<u>154.6 %</u>	<u>33.1 %</u>
<u>Proxy Group of Eight Utilities Selected on the Basis of Least Relative Distance</u>							
American Water Works Co., Inc.	132.4 %	141.6 %	155.5 %	178.1 %	199.0 %	161.3 %	38.0 %
Berkshire Energy Resources	136.4	121.4	115.2	117.7	142.6	126.7	21.1
CMS Energy Corp.	185.0	190.7	196.4	216.6	239.2	205.6	51.4
Eastern Utilities Associates	136.4	126.7	106.7	119.8	142.1	126.3	20.8
Energy West Inc.	200.5	186.9	182.6	166.2	166.7	180.6	44.6
Hawaiian Electric Industries, Inc.	141.1	148.8	146.8	147.0	153.9	147.5	32.2
Southern Company	159.9	173.5	175.9	167.6	198.6	175.1	42.9
United Water Resources, Inc.	127.3	117.1	132.7	152.3	172.8	140.4	28.8
Average						<u>157.9 %</u>	<u>35.0 %</u>

Notes: (1) Market to Book Ratio = average of yearly high-low market price divided by the average of beginning and ending year's balance of book common equity per share.
(2) (1 - (100 / column 6)).

Source of Information: Standard & Poor's Compustat Services, Inc., PC Plus Database

Consumers Illinois Water Company
Calculation of Projected BR + SV

	1	2	3	4	5	6	7	8	9	10	11
	Common Shares Outstanding (1) (000,000)		Projected 2002 - 2004 (1)								
	Actual 1998	Projected 2002-2004	S Factor (2)	High Stock Price	Low Stock Price	Book Value	Average Stock Price (3)	V Factor (4)	SV (5)	BR (6)	BR + SV (7)
<u>Proxy Group of Seven Water Companies</u>											
American Water Works Co., Inc.	81.02	99.00	4.1 %	\$45.0	\$35.0	\$20.00	\$40.00	50.0 %	2.1 %	6.2 %	8.3
Conn. Water Service, Inc.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E'town Corporation	8.47	8.80	0.8	50.0	35.0	35.60	42.50	16.2	0.1	3.2	3.3
Middlesex Water Company	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pennichuck Corporation	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Philadelphia Suburban Corp.	27.73	42.00	8.7	35.0	25.0	12.00	30.00	60.0	5.2	5.8	11.0
United Water Resources, Inc.	37.97	38.50	0.3	25.0	18.0	15.00	21.50	30.2	0.1	3.8	3.9
Average			3.5 %					39.1 %	1.9 %	4.8 %	6.6 %
<u>Proxy Group of Eight Utilities Selected on the Basis of Least Relative Distance</u>											
American Water Works Co., Inc.	81.02	99.00	4.1 %	\$45.0	\$35.0	\$20.00	\$40.00	50.0 %	2.1 %	6.2 %	8.3 %
Berkshire Energy Resources	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CMS Energy Corp.	108.11	137.00	4.9	80.0	55.0	35.00	67.50	48.1	2.4	7.2	9.6
Eastern Utilities Associates	20.44	20.45	0.0 (8)	40.0	25.0	18.65	32.50	42.6	0.0	0.7	0.7
Energy West Inc.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hawaiian Electric Industries, Inc.	32.12	34.50	1.4	45.0	35.0	28.75	40.00	28.1	0.4	2.2	2.6
Southern Company	698.63	620.00	(2.0) (8)	40.0	35.0	18.55	37.50	50.5	(1.0)	7.8	7.8 (9)
United Water Resources, Inc.	37.97	38.50	0.3	25.0	18.0	15.00	21.50	30.2	0.1	3.8	3.9
Average								41.6 %	1.0 % (9)	4.7 %	5.5 %

- Notes: (1) From pages 9 through 16 of this Schedule.
(2) The S Factor is the five / six year compound growth rate between the 1998 and 2003 / 2004 (mid-point of 2002-2004 / 2003-2005 projection) common shares outstanding.
(3) The Average Stock Price is the average of column 4 and column 5.
(4) $(1 - (\text{column 6} / \text{column 7}))$
(5) Column 3 * column 8.
(6) From page 8, column 14 of this Schedule.
(7) Column 9 + column 10.
(8) Projected 2003-2005.
(9) Excludes negative growth rate, since it is illogical that investors would invest in the common equity of a firm with the expectation of negative growth.

Source of Information: Value Line Investment Survey, January 7, February 4, February 18, and March 10, 2000, Standard Edition

Consumers Illinois Water Company
Projected Internal Growth Rate

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	1998			2002-2004					2002-2004					
	Common Equity (%) (1)	Total Capital (\$ mill) (1)	Common Equity (\$ mill) (2)	Common Equity (%) (1)	Total Capital (\$ mill) (1)	Common Equity (\$ mill) (3)	Annual Common Equity Growth Rate (4)	ROE Adjustment Factor (5)	Return on Common Equity (1)	Return on Average Common Equity (6)	EPS (1)	DPS (1)	Retention Ratio (7)	Projected Internal Growth (8)
<u>Proxy Group of Seven Water Companies</u>														
American Water Works Co., Inc.	36.00 %	\$3,442.30	\$1,239.23	38.00 %	\$4,850.00	\$1,843.00	8.26 %	1.04 %	12.00 %	12.48 %	\$2.30	\$1.15	50.0 %	6.2 %
Conn. Water Service, Inc.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E'town Corporation	44.80	465.70	208.63	45.50	660.00	300.30	7.56	1.04	10.00	10.40	3.30	2.30	30.3	3.2
Middlesex Water Company	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pennichuck Corporation	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Philadelphia Suburban Corp.	46.60	496.60	231.42	47.00	1,000.00	470.00	15.22	1.07	12.50	13.38	1.50	0.85	43.3	5.8
United Water Resources, Inc.	38.10	1,198.30	456.55	47.00	1,225.00	575.75	4.75	1.02	10.50	10.71	1.55	1.00	35.5	3.8
Average														4.8 %
<u>Proxy Group of Eight Utilities Selected on the Basis of Least Relative Distance</u>														
American Water Works Co., Inc.	36.00 %	\$3,442.30	\$1,239.23	38.00 %	\$4,850.00	\$1,843.00	8.26 %	1.04 %	12.00 %	12.48 %	\$2.30	\$1.15	50.0 %	6.2 %
Berkshire Energy Resources	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CMS Energy Corp.	29.00	7,692.00	2,230.68	36.00	13,425.00	4,833.00	16.72	1.08	12.00	12.96	4.25	1.90	55.3	7.2
Eastern Utilities Associates	52.00	718.90	373.83	63.50 (9)	600.00 (9)	381.00	0.32	1.00	9.50 (9)	9.50	1.80 (9)	1.66 (9)	7.8	0.7
Energy West Inc.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hawaiian Electric Industries, Inc.	43.10	1,918.90	827.05	47.50	2,075.00	985.63	3.57	1.02	11.00	11.22	3.10	2.48	20.0	2.2
Southern Company	42.90	22,817.00	9,788.49	40.50 (9)	28,230.00 (9)	11,433.15	2.62	1.01	15.00 (9)	15.15	2.75 (9)	1.34 (9)	51.3	7.8
United Water Resources, Inc.	38.10	1,198.30	456.55	47.00	1,225.00	575.75	4.75	1.02	10.50	10.71	1.55	1.00	35.5	3.8
Average														4.7 %

- Notes: (1) From pages 9 through 16 of this Schedule.
(2) Column 1 * column 2.
(3) Column 4 * column 5.
(4) Five / six year compound growth rate in common equity from 1998 to 2002-2004 / 2003-2005 or $((\text{column 6} / \text{column 3})^{\wedge} .20) - 1) / (((\text{column 6} / \text{column 3})^{\wedge} .167) - 1)$.
(5) $2 * ((1 + \text{column 7}) / (2 + \text{column 7}))$.
(6) Column 8 * column 9.
(7) $1 - (\text{column 12} / \text{column 11})$.
(8) Column 10 * column 13.
(9) Projected 2003-2005.

Source of Information: Value Line Investment Survey, January 7, February 4, February 18, and March 10, 2000, Standard Edition

AMER. WATER WKS. NYSE-AWK				RECENT PRICE	23	P/E RATIO	13.5	(Trailing: 14.7 Median: 12.0)	RELATIVE P/E RATIO	0.94	DIV'D YLD	4.1%	VALUE LINE		
TIMELINESS 4		Raised 11/1/99		High: 9.4 10.8	9.8 13.4 14.2 16.1 16.1 19.6 22.0 29.7 33.8 34.8	Low: 7.4 8.4	6.3 7.8 10.3 12.3 12.6 13.4 17.8 19.9 25.3 20.5	Target Price Range 2002 2003 2004							
TECHNICAL 4		Lowered 2/4/00		1.50 x Dividends p sh divided by Interest Rate Relative Price: Strength										2-for-1	
BETA .50 (1.00 = Market)				2-for-1 split 5/87 2-for-1 split 7/96											
2002-04 PROJECTIONS															
Price		Gain		Return											
High 45		(+95%)		21%											
Low 35		(+58%)		14%											
Insider Decisions															
M A M J J A S O N															
Options to Buy 0 0 0 0 0 0 0 0 0 0 0 0 0															
Options to Sell 2 0 0 0 0 0 0 0 0 0 0 0 0															
Institutional Decisions															
1Q1999		2Q1999		3Q1999		Percent shares traded		4.5		3.0		1.5			
to Buy 80		76		77											
to Sell 31270		30267		30915											
1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000															
6.22 6.80 7.13 7.73 7.94 8.40 8.66 9.32 10.28 10.59 11.48 11.79 11.84 11.41 11.97 12.56 12.70 14.00															
.93 1.10 1.16 1.37 1.41 1.50 1.38 1.65 1.98 1.97 2.21 2.26 2.42 2.48 2.79 3.05 3.15 3.40															
.63 .77 .77 .91 .91 .92 .78 .93 1.14 1.04 1.15 1.17 1.26 1.31 1.45 1.58 1.63 1.75															
.18 .20 .25 .28 .32 .34 .37 .40 .43 .47 .50 .54 .64 .70 .76 .82 .86 .94															
1.21 1.36 1.75 2.34 2.56 2.59 3.45 3.26 2.97 3.18 3.09 4.07 4.88 3.49 4.42 4.42 4.65 4.95															
4.80 5.36 6.05 6.45 7.01 7.59 8.00 8.52 9.23 9.82 10.49 11.23 12.07 13.47 14.31 15.29 15.25 16.00															
59.70 59.92 60.23 60.38 60.92 60.92 60.95 61.24 61.59 62.07 62.49 65.32 67.83 78.42 79.69 81.02 96.50 96.50															
5.3 5.2 8.3 10.0 10.9 8.9 11.6 8.7 9.3 11.5 12.4 12.0 12.1 15.0 15.8 19.3 17.7															
.45 .48 .67 .68 .73 .74 .88 .65 .59 .70 .73 .79 .81 .94 .91 1.02 .99															
5.3% 5.0% 3.9% 3.1% 3.2% 4.1% 4.1% 5.0% 4.1% 3.9% 3.5% 3.8% 4.2% 3.6% 3.3% 2.7% 3.0%															
CAPITAL STRUCTURE as of 9/30/99															
Total Debt \$2577.3 mill. Due in 5 Yrs \$535.0 mill.															
LT Debt \$2396.8 mill. LT Interest \$185.0 mill.															
(Total interest coverage: 2.2x)															
Pension Liability None															
Pfd Stock \$94.0 mill. Pfd Div'd \$4.0 mill.															
1.6 mill. shs. 8.5%; 466,935 shs. 5%; (all \$25 par and cum.). Also \$43.5 mill. (par value) pref. stock of subsidiaries, 3.9% to 11.0%.															
Common Stock 96,914,952 shs.															
MARKET CAP: \$2.2 billion (Mid Cap)															
CURRENT POSITION (MILL.)															
Cash Assets 12.7 39.1 46.0															
Other 160.2 172.7 238.3															
Current Assets 172.9 211.8 284.3															
Accts Payable 42.8 56.7 49.1															
Debt Due 159.9 141.9 180.5															
Other 103.8 102.7 167.5															
Current Liab. 306.5 301.3 397.1															
Fix. Chg. Cov. 217% 272% 262%															
ANNUAL RATES of change (per sh)															
Past 10 Yrs. Past 5 Yrs. Est'd '96-'98 to '02-'04															
Revenues 4.0% 2.0% 6.0%															
"Cash Flow" 7.0% 6.0% 7.0%															
Earnings 4.5% 5.5% 8.0%															
Dividends 9.5% 10.5% 7.0%															
Book Value 7.5% 8.0% 5.5%															
American Water Works should make decent earnings progress in 2000.															
Despite weather-related restrictions within a number of subsidiary service territories, AWK likely grew its top and bottom-lines in 1999 by 20% and 3%, respectively, primarily as a result of successful geographic diversification. The recently acquired National Enterprises (which serves approximately 1.5 million people in Missouri, Indiana, Illinois, and New York) should continue to provide a platform for geographic expansion, while also providing a measure of earnings stability against any future weather-related earnings shortfalls. Meantime, the company's Pennsylvania subsidiary has been granted a \$24.6 million (8.7%) rate increase. This, along with several additional pending rate hikes and a growing customer base, should drive a single-digit earnings gain in 2000.															
The company continues to grow through acquisitions. The high cost of upgrading our nation's water systems is forcing many smaller municipal water companies to turn to larger, better financed players (such as AWK) for as-															
sistance. As the largest domestic publicly owned water utility, American has the means to effectively acquire and operate smaller systems. In 1999, AWK bought 16 smaller water systems, which added 516,000 customers. Most recently, American has agreed to acquire SJW Corp. (AMEX: SJW), which provides water to 216,000 customers in California, for \$390 million in cash. This merger, along with the recently announced acquisition of Citizens Utilities Company, should close by yearend, pending regulatory approval. The two additions offer additional geographic diversity, and should become accretive to earnings during 2001.															
American Water Works shares are ranked to lag the market in the year ahead. However, conservative investors should note that the stock merits our top rank for Safety, and the company also possesses a solid Financial Strength rating. Furthermore, the shares offer a steadily increasing dividend. With the shares off over 20% from our November report, 3- to 5-year total-return potential at the recent price is worthwhile.															
Steven Brachman February 4, 2000															

EASTERN UTILITIES NYSE-EUA										RECENT PRICE	31	P/E RATIO	19.4 (Trailing: 18.9 Median: 12.0)	RELATIVE P/E RATIO	1.50	DIV'D YLD	5.4%	VALUE LINE		
TIMELINESS — Suspended 2/12/99										High: 41.8 41.5 25.0 25.3 29.9 27.8 25.3 24.5 26.8 28.4 31.6 31.1	Target Price Range							2003 2004 2005		
SAFETY — Lowered 12/2/99										Low: 30.4 20.8 15.8 20.4 23.6 21.1 21.3 14.5 16.9 23.6 26.5 30.0								80 60 50 40 32 24 20 16 12 10 8 6 4		
TECHNICAL — Suspended 2/12/99																				
BETA .45 (1.00 = Market)																				
2003-05 PROJECTIONS																				
Price Gain Return																				
High 40 (+30%) 11%																				
Low 25 (-20%) 1%																				
Insider Decisions																				
Institutional Decisions																				
CAPITAL STRUCTURE as of 9/30/99																				
Total Debt \$307.3 mill. Due in 5 Yrs \$257.9 mill.																				
LT Debt \$127.3 mill. LT Interest \$24.4 mill. (LT interest earned: 2.6x)																				
Leases, Uncapitalized: None																				
Pension Liability None																				
Pfd Stock \$35.2 mill. Pfd Div'd \$2.3 mill.																				
Common Stock 20,435,997 shares as of 10/31/99																				
MARKET CAP: \$625 million (Small Cap)																				
ELECTRIC OPERATING STATISTICS																				
BUSINESS: Eastern Utilities Associates is a holding company for three retail electric utilities. Supplies power to southeastern Massachusetts and northern and southern coastal Rhode Island. Also sells power wholesale via its Montaup Electric unit. 1998 fuel sources: nuclear, 23%; gas, 29%; coal, 16%; oil, 26%; other, 6%. Utility revenue sources in '98: resid., 43%; comm., 36%; indust., 18%; other, 3%. Eastern transferred its equity interest in EUA Power back to EUA Power at no cost in 1993. Has nursing operations in energy management. '98 deprec. rate: 3.5%. Employees: 1,137. No. com. shldrs: 10,227. Chairman & CEO: Donald G. Pardus, Inc.: MA. Address: 750 W. Center St., W. Bridgewater, MA 02379. Tel.: 508-559-2000. Internet: www.eua.com.																				
Eastern Utilities may be acquired by New England Electric System (NEES) before the end of the quarter. The pact calls for NEES to buy all of EUA's outstanding common stock for \$31 a share, in an all-cash transaction. The price will be increased by \$0.003 a share per day, for each day from November 17, 1999 until closing, subject to a cap of \$0.49 a share. The merger is not contingent on the previously announced purchase of NEES by National Grid Group of the United Kingdom. But it still requires approval of various state and federal regulatory bodies, all of which are expected shortly. Despite the high payout ratio, EUA has stated that it will continue dividend payments at the current rate until the alliance is concluded. We have suspended the stock's 'timeliness' rank, since the shares are trading largely on takeover considerations. The company plans to sell its remaining nuclear assets. Its 4% interest in Millstone 3 has a book value of \$115 million. Northeast Utilities (NU), a 68% owner of the plant, seeks to sell its stake in the unit and has agreed to sell EUA's share as part of the transaction. Though the sale will almost certainly be for only a small fraction of the unit's book value, the company will recover the loss through a nonbypassable transition charge. Meanwhile, EUA has settled its claim against NU for \$11 million, resulting from the latter's subpar operation of the facility. EUA also has an agreement to sell its 2.25% ownership of Vermont Yankee for \$600,000. The plant has no book value. The merger with NEES represents a negligible premium over the stock's recent quote. That's understandable, in light of EUA's limited prospects as a stand-alone entity. Not only are the company's finances below average for a utility, but, because of EUA's small size, it would have difficulty competing against its larger neighbors in the new unregulated environment. Moreover, Cogenex, the major non-core subsidiary, is not living up to expectations. In all, we consider the acquisition price a fair one. Since the alliance will probably be finalized shortly, shareholders will fare equally well by retaining their stock in anticipation of the merger or selling their holdings now.																				
Annual Rates of Change (per sh)																				
Revenues																				
"Cash Flow"																				
Earnings																				
Dividends																				
Book Value																				
QUARTERLY REVENUES (\$ mill.)																				
EARNINGS PER SHARE																				
QUARTERLY DIVIDENDS PAID																				

(A) EPS basic. Excl. gains (losses): '90, 46¢ and (\$9.24); '95, (\$2.2); '96, (16¢); '97, 7¢; '98 (10¢); '99, (82¢). Next egs. rpt. due late Apr. (B) Next div'd meeting about Apr. 17. Next ex

date about Apr. 26. Div'd prmt. dates: About the 15th of Feb., May, Aug., Nov. = Div'd reinvest. plan avail. (C) Incl. def'd chrgs. & other. In '98: \$14.44/sh. (D) In millions. (E) Rate at

lowed on com. eq. in RI in '92, 11.43%; no rate specified in MA or by FERC. Earn. on avg. com. in '98: 9.8%. Reg. Clm.: Avg.

Company's Financial Strength
Stock Price Stability 100
Price Growth Persistence 15
Earnings Predictability 75

To subscribe call 1-800-833-0046

© 2000, Value Line Publishing, Inc. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.

E'TOWN CORP. NYSE-ETW										RECENT PRICE	63	P/E RATIO	24.5 (Trailing: 24.2 Median: 14.0)	RELATIVE P/E RATIO	1.71	DIV'D YLD	3.2%	VALUE LINE						
TECHNICAL -- Suspended 12/3/99										High: 29.7	28.7	27.3	28.8	29.3	35.8	32.0	30.5	32.1	40.8	48.3	63.4	Target Price	Range	
BETA 50 (1.00 = Market)										Low: 25.7	23.8	20.8	23.0	25.5	27.6	23.5	24.8	26.4	29.1	33.6	37.0	2002	2003	2004
2002-04 PROJECTIONS																								
Insider Decisions																								
Institutional Decisions																								
CAPITAL STRUCTURE as of 9/30/99										Total Debt \$348.3 mill. Due in 5 Yrs \$80.0 mill. LT Debt \$267.2 mill. LT Interest \$16.0 mill. (LT Interest Earned: 3.1x; Total interest coverage: 3.0x)														
Pension Liability: None										Pfd Stock \$12.0 mill. Pfd Div'd \$8 mill. 120,000 shs, 200,000 shares authorized. 5.9%. (\$100 par value and cumulative). Mandatory redemption of entire issue on March 1, 2004.														
Common Stock 8,637,588 shs.										MARKET CAP: \$550 million (Small Cap)														
CURRENT POSITION										1997 1998 9/30/99 (\$MILL.)														
Cash Assets										6.2 3.6 10.2														
Other										33.7 37.9 58.6														
Current Assets										39.9 41.5 68.8														
Accts Payable										11.6 12.5 21.5														
Debt Due										23.0 22.0 81.1														
Other										20.6 20.3 37.8														
Current Liab.										55.2 54.8 140.4														
Fbx. Chg. Cov.										217% 230% 230%														
ANNUAL RATES										Past 10 Yrs. Past 5 Yrs. Est'd '96-'98 to '02-'04														
Revenues										-3.5% -3.5% 6.5%														
"Cash Flow"										1.5% 1.5% 7.0%														
Earnings										-5% 5% 6.0%														
Dividends										1.0% 5% 2.0%														
Book Value										2.5% 2.5% 6.5%														
QUARTERLY REVENUES (\$ MILL.)										Cal-ender Mar.31 Jun.30 Sep.30 Dec.31 Full Year														
1996										25.8 27.2 28.2 29.2 110.4														
1997										30.1 32.5 38.6 32.6 133.8														
1998										30.5 32.8 38.8 32.7 134.8														
1999										36.5 41.6 45.6 38.3 162														
2000										37.5 42.5 49.0 41.0 170														
EARNINGS PER SHARE										Cal-ender Mar.31 Jun.30 Sep.30 Dec.31 Full Year														
1996										.42 .51 .58 .45 1.96														
1997										.44 .55 .92 .50 2.41														
1998										.51 .62 1.00 .54 2.67														
1999										.49 .66 .91 .49 2.55														
2000										.50 .67 .98 .50 2.65														
QUARTERLY DIVIDENDS PAID										Cal-ender Mar.31 Jun.30 Sep.30 Dec.31 Full Year														
1996										.51 .51 .51 .51 2.04														
1997										.51 .51 .51 .51 2.04														
1998										.51 .51 .51 .51 2.04														
1999										.51 .51 .51 .51 2.04														
2000										.51 .51 .51 .51 2.04														
BUSINESS:										E'town Corporation is the parent company of Elizabethtown Water Company, the sixth largest investor-owned water utility in the U.S. Provides water service to about 200,000 customers in central New Jersey. Also operates three non-regulated subsidiaries. Edison Water Company (formed in 1997). Liberty Water Company (formed in 1998). AWG (acq. March 1998) provides design services for water and wastewater facilities. E'town properties owns parcels of undeveloped land in New Jersey. 1998 depreciation rate: 2.0%. Has 505 employees. Officers and Directors own 9.2% of common (3/99 Proxy). Chairman: Anna Estabrook. CEO: Robert Keane. Add.: 600 South Ave., Westfield, NJ 07090. Telephone: (908) 654-1234. Internet: www.etownwater.com.														
E'town Corporation has agreed to be acquired by Thames Water, a U.K.-based water supplier. The proposed purchase is for \$607 million in cash or about \$68 per E'town share. This represented about a 30% premium to E'town's stock price prior to the acquisition announcement. Thames is the third largest water service provider in the world, with approximately 20 million customers. The company already operates in Europe and Asia, but is seeking to further expand its services internationally, particularly in the United States.										We expect that the deal will close by the end of this year. In order to be finalized, the acquisition requires the approval of both sets of shareholders and state and federal regulatory authorities. A special shareholders meeting to vote on the merger is expected during the first quarter of 2000. We don't expect that the proposed acquisition will run into any regulatory problems, since Thames does not yet have a competitive market share in the U.S. Current investors are advised to sell their E'town shares prior to the closing of the acquisition. Currently,														
E'town is trading at a mere 8% discount to Thames offering price. This extra potential appreciation, assuming the deal is consummated, does not appear to us to warrant holding on to these shares. There is always the risk that the acquisition may not close. In that case, E'town shares would likely fall to pre-announcement levels. This is because the Thames offer is significantly above the valuation that would seem to apply to an independent E'town, based on relevant historical measures. Thames appears to have paid a high price for E'town because of the scarcity of other acquisition candidates in the U.S. water utility industry.										Meanwhile, as a stand alone company we think E'town should produce respectable earnings growth out to 2002-2004. The main driver of these profit increases will likely come from the utility's non-regulated operations. Specifically, E'town hopes to capitalize on its financial strength and water management expertise to capture business opportunities that are surfacing in lieu of the privatization of many municipal water facilities.														
Yehuda Fruchter										February 4, 2000														

(A) Based on average earnings through 1996, diluted thereafter. Excludes nonrecurring gains (losses): '99, 24¢. Next earnings report due mid-Feb.
(B) Next dividend meeting about Feb. 19th. Goes ex. about Mar. 20th. Div. payment dates: about the 30th of Mar., Jun., Sep., Dec. Dividend reinvestment available (5% discount).
(C) Allowed return on common: 11.25%.
© 2000, Value Line Publishing, Inc. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, personal use. No part of it may be reproduced, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.
To subscribe call 1-800-833-0046.
Yehuda Fruchter February 4, 2000

PHILA. SUBURBAN NYSE-PSC										RECENT PRICE	21	P/E RATIO	18.4	(Trailing: 19.3) Median: 13.3	RELATIVE P/E RATIO	1.29	DIV YLD	3.5%	VALUE LINE										
TIMELINESS 4 Lowered 6/25/99										High: 8.4	7.3	7.5	8.2	8.3	10.4	9.8	10.8	14.9	22.2	30.1	30.1	Target Price Range		2002 2003 2004					
SAFETY 2 Raised 6/11/99										Low: 6.1	6.4	5.2	5.9	6.9	7.8	8.6	8.7	10.3	11.4	18.9	19.8								
TECHNICAL 3 Raised 10/23/99										1.30 x Dividends p sh divided by Interest Rate										4-for-3									
BETA 55 (1.00 = Market)										Relative Price Strength										3-for-2									
2002-04 PROJECTIONS										3-for-2 split 7/96										4-for-3 split 1/98									
										Options: No																			
Price Gain Return																													
High 40 30 (+90%) 20%																													
Low 40 30 (+45%) 12%																													
Insider Decisions																													
M A M J J A S O N																													
Options to Buy 0 0 0 1 0 1 1 0 0 0																													
Options to Sell 0 0 0 0 0 0 0 0 0 0																													
Institutional Decisions																													
10/1999 20/1999 30/1999																													
to Buy 65 50 44																													
to Sell 22 22 22																													
High 7908 8081 8035																													
Percent shares traded 4.5																													
3.0																													
1.5																													
1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000																													
4.53 5.36 6.07 6.91 7.19 8.70 8.86 5.27 5.57 4.75 4.44 4.73 4.78 4.85 5.26 5.45 6.35 6.90																													
.77 .82 .92 1.12 1.18 1.29 1.26 1.13 1.16 1.02 1.09 1.09 1.22 1.31 1.45 1.59 1.70 1.80																													
.58 .54 .56 .61 .56 .59 .53 .64 .65 .62 .64 .66 .77 .78 .88 1.03 1.10 1.20																													
.42 .44 .44 .46 .47 .47 .47 .50 .50 .52 .54 .55 .57 .59 .62 .67 .70 .74																													
.69 .98 1.06 1.27 1.44 1.72 2.24 1.97 1.40 1.57 1.23 1.19 1.36 1.24 1.50 2.13 1.60 1.50																													
5.26 5.38 5.52 5.41 5.50 5.62 5.70 5.48 5.38 5.44 5.96 6.26 6.41 7.00 7.39 8.35 9.10 9.75																													
13.41 13.52 13.62 14.39 14.45 14.48 15.08 15.61 15.90 19.66 22.81 22.95 24.48 25.25 25.91 27.73 41.60 41.20																													
9.7 10.7 12.2 12.8 14.0 12.3 12.9 10.2 10.8 12.5 14.4 13.5 12.0 15.6 17.8 22.5 21.0 21.0																													
.82 1.00 .99 .87 .94 1.02 .98 .76 .69 .76 .85 .89 .80 .98 1.03 1.19 1.15 1.15																													
7.5% 7.6% 6.5% 5.8% 6.0% 6.5% 6.9% 7.7% 7.2% 6.8% 5.9% 6.0% 6.2% 4.9% 3.9% 2.9% 3.0% 3.0%																													
CAPITAL STRUCTURE as of 9/30/99																													
Total Debt \$444.9 mil. Due in 5 Yrs \$270.0 mil.																													
LT Debt \$411.5 mil. LT Interest \$31.0 mil.																													
(Total interest coverage: 3.4x)																													
133.5 82.3 88.6 93.3 101.2 108.6 117.0 122.5 136.2 151.0 260 285																													
7.8 9.7 11.0 11.5 14.7 15.6 19.0 19.8 23.2 28.8 45.0 50.0																													
39.1% 37.4% 39.2% 41.2% 41.5% 42.5% 40.4% 41.4% 40.6% 40.5% 40.5% 40.5%																													
-- -- -- 2.3% 5.5% .8% 1.6% -- 1.6% 1.5% 1.5% 1.5%																													
65.5% 67.3% 63.7% 56.8% 49.9% 50.2% 51.9% 54.1% 54.4% 52.7% 53.5% 53.5%																													
34.5% 32.7% 32.5% 39.5% 46.7% 47.4% 46.4% 44.0% 44.8% 46.6% 46.5% 46.5%																													
249.0 261.4 263.7 270.5 291.2 303.1 338.0 401.7 427.2 496.6 800 850																													
288.4 306.7 321.0 345.6 366.2 385.7 436.9 502.9 534.5 609.8 1050 1100																													
5.9% 6.8% 6.6% 6.7% 7.1% 7.0% 7.7% 6.8% 7.4% 7.6% 7.5% 7.5%																													
9.1% 11.4% 11.5% 9.8% 10.1% 10.4% 11.7% 10.7% 11.9% 12.3% 12.5% 12.5%																													
9.1% 11.4% 11.8% 9.9% 10.2% 10.3% 11.7% 11.2% 12.0% 12.4% 12.5% 12.5%																													
1.0% 2.5% 2.7% 1.6% 1.6% 2.1% 3.5% 2.8% 3.6% 4.5% 4.0% 4.0%																													
89% 78% 79% 85% 85% 81% 71% 75% 70% 64% 62% 61%																													
BUSINESS: Philadelphia Suburban Corp., parent of Philadelphia Suburban Water Co. (PSWC), a regulated utility, provides water to approximately 1.8 million residents in Pennsylvania, Ohio, New Jersey, Illinois, and Maine. Sold three of four non-water businesses in '91; sold telemarketing group in '93. Acquired Consumers Water 4/99. Water supply revenues '98: residential, 67%; commercial, 22%; industrial & other, 11%. Average consumption per customer '98: 102,900 gal. Has approx. 540 employees, 13,650 stockholders. Compagnie Generale des Eaux controls 13.2% of common; Officers and Directors, 2.2% (4/99 Proxy). Chairman, Pres. & C.E.O.: Nicholas DeBenedictis, Inc. PA. Address: 762 Lancaster Avenue, Bryn Mawr, Pennsylvania 19010. Telephone: 610-527-8000.																													
We think that Philadelphia Suburban posted a modest earnings gain in 1999. As we went to press, the company had yet to announce profits for the fourth quarter and full year. When those data do become available, we expect PSC to report earnings of \$1.10 a share, an improvement of 7% over the previous year's tally. The company continues to be active on the merger front, having completed 17 acquisitions and growth ventures during the year. This expansion, along with natural system growth, helped PSC to increase its customer count by approximately 3%, in an industry with a norm closer to 1%. We expect the company to continue growing through acquisitions. Because of the high costs involved in maintaining and upgrading water mains and pumping stations, smaller water systems' interests are often better served by selling their assets to well-capitalized companies such as PSC. Since 1992, the company has pursued a regional growth-through-acquisition strategy that has included over 40 water companies and wastewater systems. With the water industry remaining highly fragmented and still in the early																													
stages of consolidation, we expect PSC to continue expanding its customer base through the purchase of smaller public and privately owned systems. We expect healthy revenue and earnings growth through 2000 and beyond, aided by acquisitions and cost-cutting efforts. PSC might also enhance its growth by adding more services under contract. The outsourcing of services is a viable alternative for municipal systems that are looking to make operations more efficient but are reluctant to sell assets. Along these lines, PSC recently announced that its Consumers New Jersey subsidiary has been awarded a three-year contract to provide water meter reading, billing, and cash remittance services for the Winslow Township municipal water system in Camden County, New Jersey. Though ranked as untimely, Philadelphia Suburban stock is a good choice for conservative investors. Three- to 5-year total-return potential on a risk-adjusted basis is decent, and may well be enhanced by additional acquisitions, which are not included in our projections.																													
Steven Brachman																													
February 4, 2000																													
(A) Based on avg. shares outstanding. Excl. nonrec. charges: '86, 12%; '90, 74%; '91, 67%; '92, 72%; '99 11%; disc. operations: '96, 54%. Next earnings report due mid-February.										(B) Next dividend meeting about Feb. 5th. Goes ex about Feb. 15th. Div'd. payment dates: 1st of March, June, Sept., & Dec. Div'd. reinvestment plan available.										(C) In millions, adjusted for stock splits. (D) Return on common equity allowed by PA PUC in '91 rate adjustment: 12.0%. Return on avg. common equity in '98, 11.7%.									
Company's Financial Strength B+										Stock's Price Stability 85										Price Growth Persistence 90									
Earnings Predictability 95																													